

SURVEY REPORT

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION



FISH MANAGEMENT SURVEY AND RECOMMENDATIONS

FOR

LINDSAY CITY LAKE

2025

SURVEY REPORT

State: Oklahoma

Project Title: Fish Management Survey Report

Period Covered: 2025

Prepared by: OFRL

Date Prepared: January 2026

ABSTRACT

Lindsay City Lake was surveyed by spring electrofishing in 2023 to assess the Largemouth Bass population. Hoop netting for Channel Catfish was completed in 2021 and 2025. Additional sampling occurred in 2024 and 2025 as part of ongoing research to estimate the population size. Trap netting for White Crappie occurred in 2024 and a Flathead Catfish electrofishing sample occurred in 2025. The fishery consists of Largemouth Bass, various Sunfish species, White Crappie, and Channel Catfish. No regulation changes are recommended at this time.

INTRODUCTION

Lindsay City Lake is located in George Brown Park west of Highway 76 in Lindsay, Oklahoma. The lake is twenty acres in size, has just over one mile of shoreline and is adjacent to a 9-hole golf course. Fish habitat consists of flooded willow stubs and artificial PVC fish attractor cubes. At full pool, as minimal amount of Pond Weed, Water Willow, and Bulrush is present around the perimeter of the lake. Secchi depth is generally around 40 centimeters.

Fish attractor sites have been established to improve angler success and are periodically refurbished. Fish attractor sites were recently established in 2024 ([Fish Attractors Map \(arcgis.com\)](#)).

Our primary management goal is to establish relevant baseline data considering the lack of sampling until recently. Lindsay lake has one fishing dock that also serves as a loading/unloading dock for the single boat ramp on the lake. The fishery consists of Largemouth Bass, various sunfish species, White Crappie, and Channel Catfish.

Aquatic Nuisance Species

There are no known ANS in Lindsay.

RESULTS

Hoop Net (Gear 33)

The lake was sampled for Channel Catfish using tandem hoop net sets from August 20-22, 2025. Ten randomly selected sites were sampled for a total of 712 units of effort. Mean water temperature was 29.4 °C and a total of 102 fish were caught.

Channel Catfish had a mean total length (TL) of 350 mm (range 230-521). The length-frequency plot was bimodal with peaks at 270 and 400 mm TL, suggesting an additional recruitment event after the 2022 sample (Figure 1). Channel Catfish had a mean CPUE of 3.43 (0.82-6.05 95% CI) with a standard error (SE) of 1, resulting in a 95% confidence interval (CI) ranging from 1 to 6 (Table 1). Mean CPUE was roughly half of what was observed in 2022 (mean CPUE = 7). However, relative standard error (RSE) was 38.9, suggesting the gear would only detect large changes in relative abundance (i.e., ~78%). Likewise, RSE values for substock, stock, and quality sized fish were caught also suggested CPUE could not properly track changes in relative abundance for size categories (Table 1). Overall relative weight (Wr) was 82.92, which fell below acceptable (i.e., ≥ 90) and the statewide 50th percentile (88.00). Likewise, sub stock, stock, and quality sized fish Wr also fell below acceptable (range = 80.2 – 87.55). As part of an ongoing research project related to Channel Catfish, abundance was estimated in Summer 2025. Hoop nets and trap nets were used to capture fish across two distinct sampling events and fish were marked by clipping the fish's left pelvic fin initially followed by the right pelvic fin if necessary (i.e., a second recapture of the same fish). Abundance was estimated using the Schnabel Method. The population was estimated at 208 individuals (CI: 115 – 406) in 2025 compared to 192 individuals (CI: 96 – 420) in 2024.

Flathead Catfish Electrofishing (Gear 98)

The entirety of the lake was sampled for Flathead Catfish using low-frequency electrofishing on three separate occasions during the Summer of 2025. Despite encountering Flathead Catfish in the past (one individual in 2023), no fish were caught and it is assumed that if Flathead Catfish are still present, the population is so small that it is essentially undetectable with our standard sampling methods.

RECOMENDATIONS

1. Continue to monitor population dynamics for sportfish species (Largemouth, Sunfish Spp., Channel Catfish).
2. Crappie harvest is highly encouraged (within the limit of the statewide regulation of 37 fish per angler per day).
3. No regulation changes are recommended at this time.

Table 1. Channel Catfish catch per unit effort for the total sample and broken down by size category for Lindsay City Lake.

	Mean	Count	RSE	SE	L 95% CI	U 95% CI	N RSE = 12.5 (25% range)	N RSE = 20 (40% range)
Lindsay								
Total	3.43	10	38.90	1.34	0.82	6.05	97	38
Substock	0.77	-	48.86	0.38	0.03	1.51	153	60
Stock	1.95	-	41.28	0.81	0.37	3.53	109	43
Quality	0.71	-	50.00	0.35	0.01	1.40	160	62

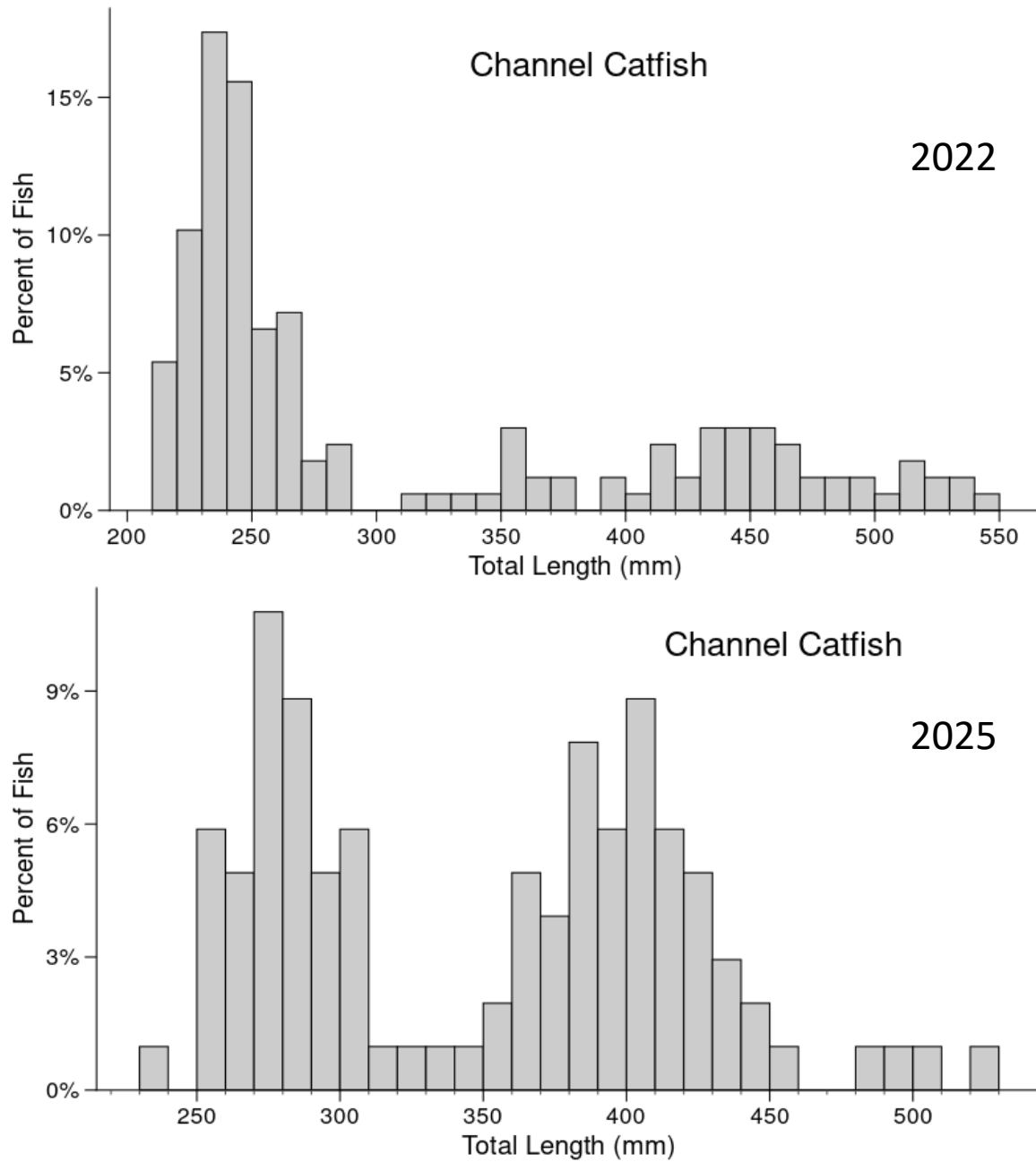


Figure 1. Length-frequency distribution of Lindsay Lake Channel Catfish sampled in 2022 and 2025.